## Hyperion 2035 Recycled Water Program

Santa Monica Bay Restoration Commission December 8, 2020

Huub Cox LA Sanitation and Environment Water Recycling Implementation Division



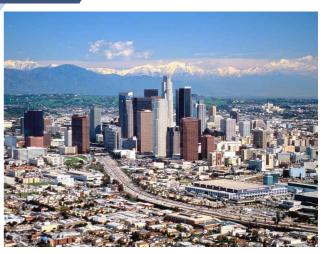
#### LA's Green New Deal

#### Sustainability goals for water

- Reduce our dependency on imported water
- Be resilient to disasters and drought
- Keep our rivers and beaches clean, usable, and thriving with wildlife
- Be a leader in water conservation.

#### Specific targets

- Reduce purchased of imported water by 50% in 2025
- Source 50% of City's water supply locally by 2035
- Recycle 100% of all wastewater for beneficial reuse by 2035



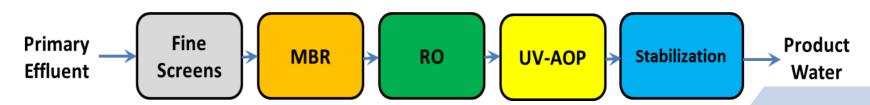


## LASAN Recycled Water Program

- Terminal Island WRP
  - TIWRP Advanced Water Purification Facility Phase I 2006
  - TIWRP Advanced Water purification Facility Phase II 2017
- Donald C. Tillman WRP
  - DCT Ozone Demonstration Project 2021
  - DCT Advanced Water Purification Facility 2026
- Los Angeles-Glendale WRP
  - LAG Advanced Water Purification Demonstration Facility 2024
- Hyperion WRP
  - Hyperion 2035 Program
  - Hyperion Advanced Water Purification Facility 2022
  - MBR Pilot Project 2021

#### **Hyperion 2035 overview**

- Goal: Transform Hyperion to a 100% water recycling facility by 2035 for potable reuse applications
- LASAN and LADWP partnership
- Process: Membrane bioreactors, reverse osmosis, UV advanced oxidation
- > 2035 influent flow: 272 mgd
- Projected output: up to 174 mgd of recycled water
  - up to 54 mgd to West Basin
  - up to 44 mgd RO concentrate

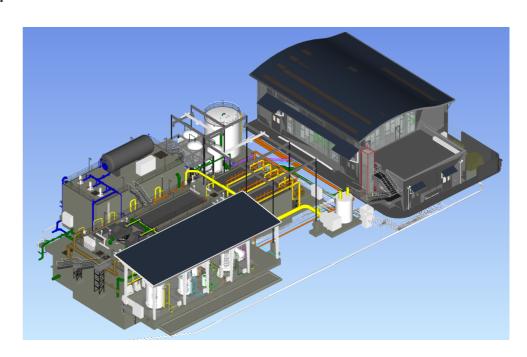


### Hyperion 2035 overview

- ➤ Three general phases: 1. Conceptual → 2020-23
  - 2. Design → 2023-25
  - 3. Construction  $\rightarrow$  2025-35
- Conceptual: Advanced treatment process
  - Wet weather flow treatment process
  - NPDES permit requirements
  - Programmatic EIR
  - Program delivery
- Design: Facility design
  - Project specific EIR
  - Permitting
- Construction: Program phasing and packaging
  - Project alternative delivery

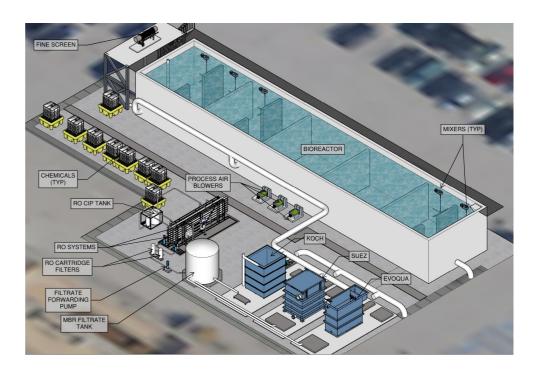
# Hyperion Advanced Water Purification Facility

- Project goals
  - 1.5 mgd for LAX and Hyperion
  - Proof of concept for 2035
- Project partners
  - LASAN, LADWP, LAWA
- Project delivery
  - Progressive Design Build
- Project cost
  - \$86 million
- Current Status
  - Site prep completed
  - Design at 70%
  - Working on NTP for construction



### **MBR Pilot Project**

- Project goals
  - Regulatory approval of MBR
  - Side-by-side comparison of 3 MBR systems
  - Design data for 2035
- Project partners
  - LASAN, LADWP, WBMWD
- Project cost
  - \$18 million
- Current status
  - In construction
  - Independent Advisory Panel



## **Questions and comments**

